

ABSTRACT OF THE DISCLOSURE

A programmable system for monitoring electricity consumption by a residence or business, including:

(a) a Measuring Transmitting Unit integrated in a main circuit breaker or utility meter in the residence or business; comprising: (1) a means of receiving AC analog signals, converting the AC analog signals to DC analog signals, summing the DC analog signals, and outputting the information; (2) a microcontroller; (3) a power line carrier transmission interface controller; and (4) a power supply for powering the Measuring Transmitting Unit; and

(b) a programmable Receiving Display Unit, comprising: (1) a power supply for powering the Receiving Display Unit; (2) a power plug; (3) a power line carrier transmission interface controller; (4) a data decoder; (5) a microcontroller; (6) memory associated with the microcontroller; (7) a visual display; and (8) a mechanism for inputting to the Receiving Display Unit; and

wherein the Measuring Transmitting Unit translates current to digitally encoded signals, and transmits the signals over existing power circuits in the residence or business; and the Receiving Display Unit receives the signals, decodes them, and translates them for viewing. A method for monitoring electricity consumption by a residence or business is also included.